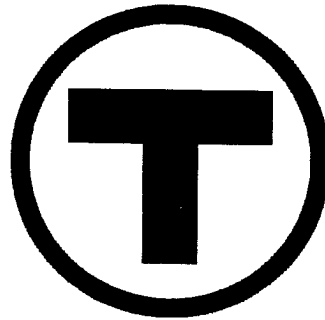

Massachusetts Bay Transportation Authority



Designing for the Future Capital Investment Program

Sustainable Design Roundtable

UMASS Boston

June 9, 2005

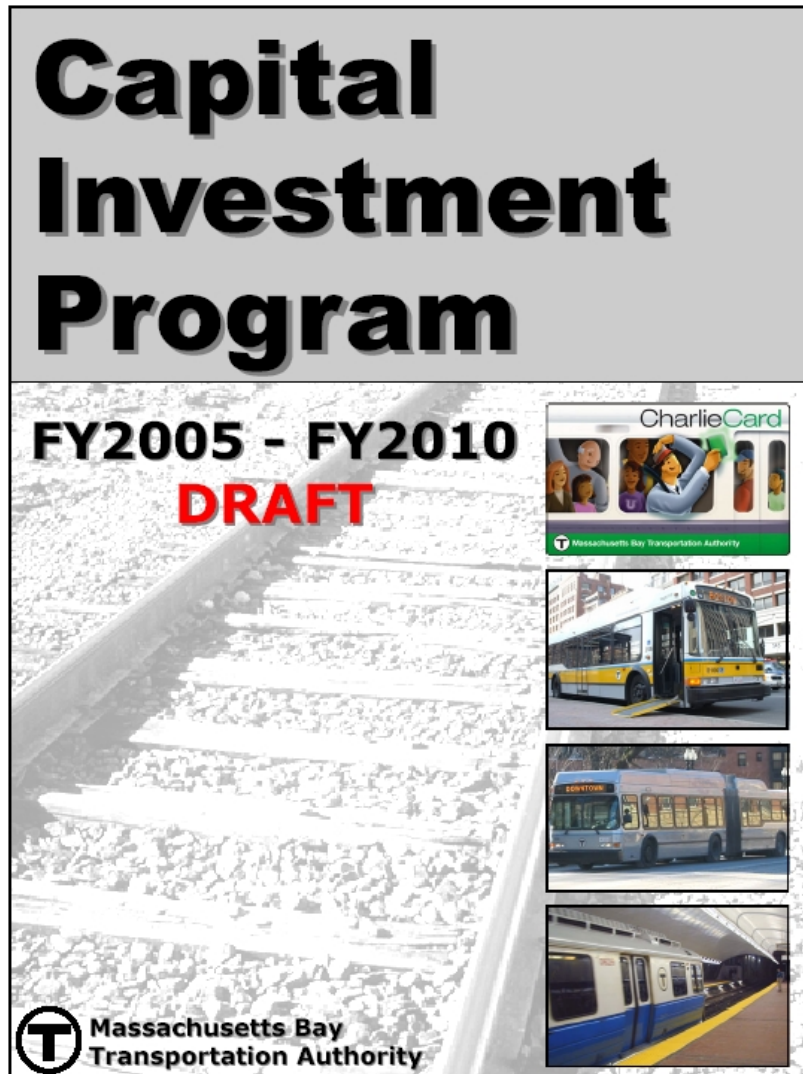


Profile of the MBTA



- Fifth largest transit agency in America
- 4.5 million people in 175 communities served
- 1.1 million passengers a day
- Bus, subway, bus rapid transit, commuter rail, trackless trolleys, ferries, paratransit (the RIDE)

What is the CIP?



- Rolling 5-year capital program
- Implements the 25-year Program for Mass Transportation
- The CIP is financially constrained
- The Draft CIP includes the current fiscal year (FY05)

How is the CIP Funded?




TEA-21

- Federal Grants
- Non-Federal
 - Revenue Bonds
 - State funds
 - Pay-as-you-go
- Alternative Financing
 - Project Financing
 - Grant Anticipation Notes

NEW ISSUE - BOOK-ENTRY ONLY Ratings: Moody's: **Aaa** Aaa
Standard & Poor's: **AAA** AAA
(See "Ratings" herein)

In the opinion of Bond Counsel, under existing law, assuming continued compliance with certain provisions of the Internal Revenue Code of 1986, as amended, interest on the Notes will not be included in the gross income of holders of the Notes for federal income tax purposes. Interest on the Notes will not constitute a preference item for the purposes of computation of the alternative minimum tax imposed on certain individuals and corporations, although interest on the Notes will be taken into account in computing the alternative minimum tax applicable to certain corporations. In the opinion of Bond Counsel, interest on the Notes and any profit made on the sale thereof are exempt from Massachusetts personal income taxes, and the Notes are exempt from Massachusetts personal property taxes. See "TAX EXEMPTION" herein.


 **\$81,665,000**
Massachusetts Bay Transportation Authority
Federal Transit Grant Anticipation Notes
2004 Series A

Dated: Date of Initial Delivery Due: September 1, as shown on the inside cover

The Notes will be issued by means of a book-entry only system evidencing ownership and transfer of the Notes on the records of The Depository Trust Company ("DTC") and its participants. Details of payment of the Notes are more fully described in this Official Statement. The Notes will bear interest from the date of initial delivery thereof and interest will be payable on March 1, 2005 and semiannually thereafter on each March 1 and September 1, calculated on the basis of a 360-day year of twelve 30-day months. The Notes are subject to redemption prior to maturity, as more fully described herein.

The Notes will constitute special obligations of the Massachusetts Bay Transportation Authority (the "Authority") payable solely from and secured by a pledge of Budgeted Revenue and funds and accounts established under the Federal Transit Grant Anticipation Note Trust Agreement dated as of July 1, 2004, by and between the Authority and U.S. Bank National Association, as trustee (the "Trustee"), as supplemented by the First Supplemental Trust Agreement authorizing the issuance of the Notes dated as of July 1, 2004, by and between the Authority and the Trustee. The Authority has no taxing power. Neither the Commonwealth of Massachusetts (the "Commonwealth") nor any political subdivision thereof shall be obligated to pay the Notes and neither the faith and credit nor the taxing power of the Commonwealth or any political subdivision thereof (other than the Authority) is pledged to such payment, except as described herein.

The scheduled payment of the principal of and interest on the Notes when due will be guaranteed under a municipal bond insurance policy to be issued by MBIA Insurance Corporation concurrently with the delivery of the Notes.



The Notes are special obligations of the Authority payable from certain federal grants received from the Federal Transit Administration pursuant to 49 U.S.C. Section 5307 and other funds as described herein. The Federal Program (defined herein) does not constitute a commitment, guarantee or obligation on the part of the United States of America to provide payment on the Notes and no rights are thereby created in any party, other than the Authority, against the Federal Transit Administration.

The Notes are offered when, as and if issued and received by the Underwriters, subject to the unqualified approval of legality by Miner, Levin, Cohen, Ferris, Glorvick and Poppe, P.C., Boston, Massachusetts, Bond Counsel to the Authority, and certain other conditions. Certain legal matters will be passed upon for the Underwriters by Palmer & Dodge LLP, Boston, Massachusetts. The Notes are expected to be available for delivery on or about August 5, 2004, as or through DTC in New York, New York.

Morgan Stanley

Bear, Stearns & Co. Inc. Lehman Brothers Raymond James & Associates, Inc.
Siebert Brandford Shank & Co., LLC UBS Financial Services Inc.

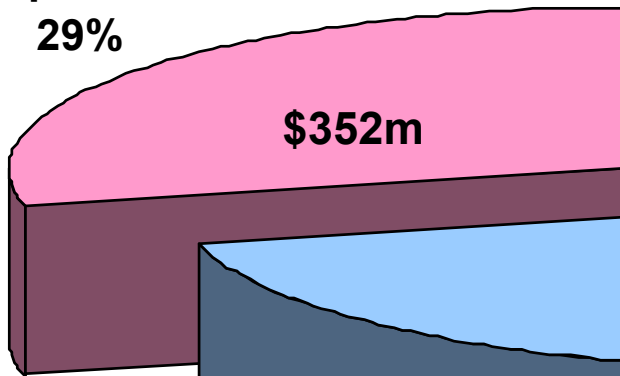
July 23, 2004



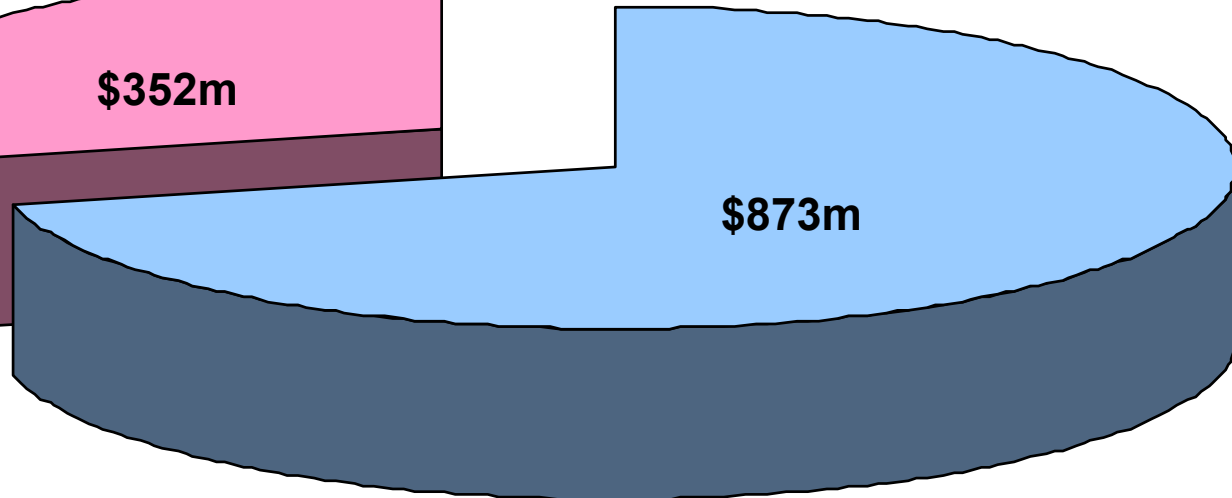
FY2005 Operating Budget

**Total Budget
\$1.2 billion**

**Debt Service
Expenses
29%**



**Operating Expenses
71%**



Debt service consumes nearly one third of the operating budget.



What does the Capital Program Invest in?



Over 2,500 Revenue Vehicles



275 Stations



885 Miles of Track



496 Bridges



20 Miles of Tunnels



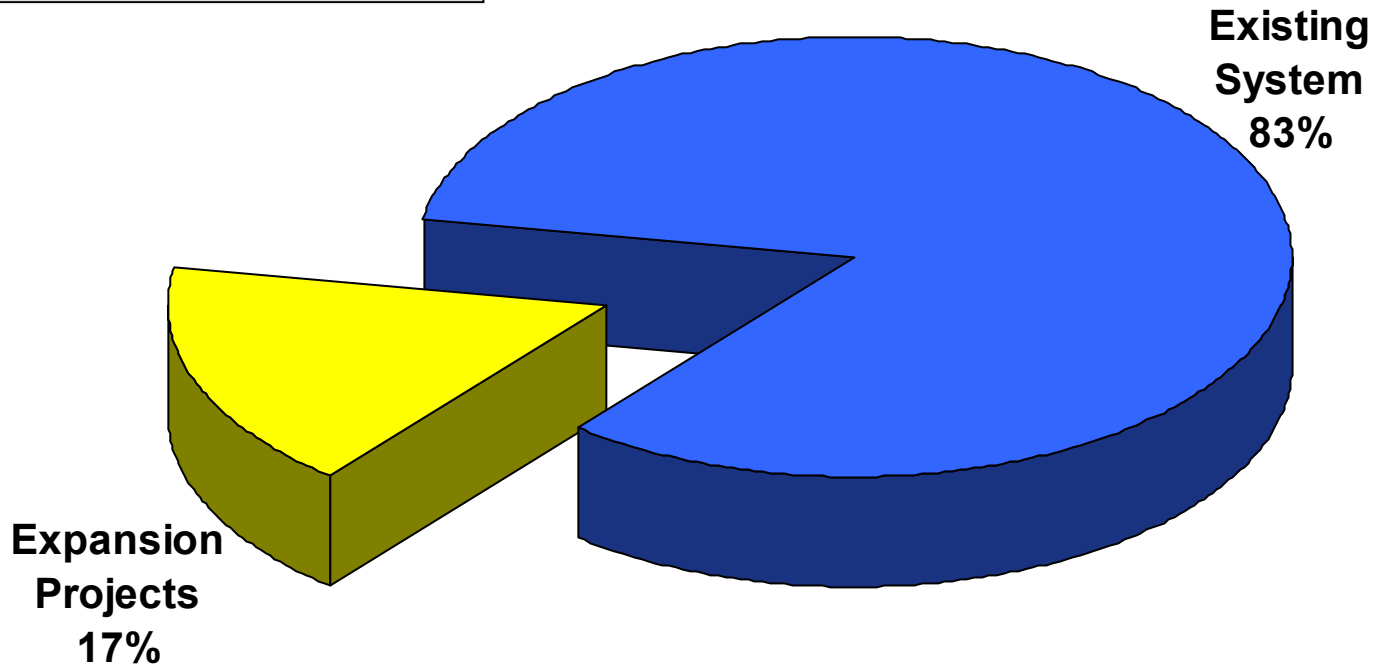
19 Maintenance Shops

The MBTA's infrastructure is extensive and has major capital needs.



Investing in the Existing System

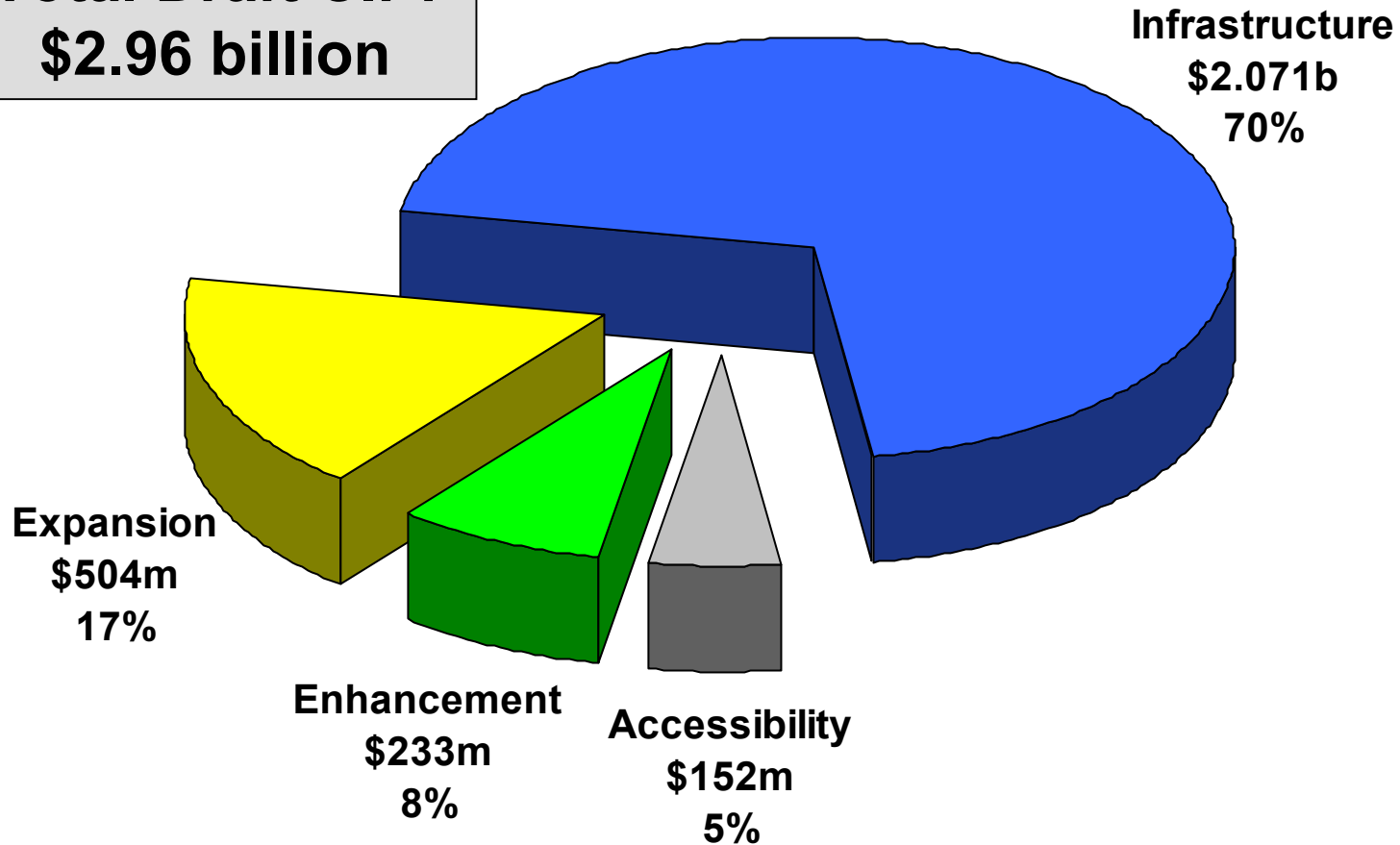
**Total Draft CIP:
\$2.96 billion**





Capital Spending – By Area

**Total Draft CIP:
\$2.96 billion**





Additions This Year



- Operations Support
 - Life-safety issues
 - Basic capital maintenance
 - “Behind-the-Scenes”
- Station Management Project
 - Automated Fare Collection
- Subway Stations
 - Ashmont and Mattapan
 - Government Center
 - North Station
 - Wonderland
- Transit Security
 - Silver Line Phase II
 - MBTA Police TPSA Strategy
- Studies and Planning
 - Wellington Bus Facility
 - Parking at Salem and Beverly



Additions This Year



- **Bus Operations**
 - 85 New Buses
 - Upgrades to facilities related to CNG vehicles and safety issues
- **Accessibility**
 - Green Line LRAP: Copley, Arlington, Gov't Center, Kenmore, BC, Brookline Village
- **Commuter Rail**
 - Repairs to two major bridges
 - Overhauls to Coaches and Locomotives
 - Signals
- **Subway**
 - Green Line D-Branch Track
 - Red Line Vehicles minor repair
- **Administrative/Other**



CIP by Area





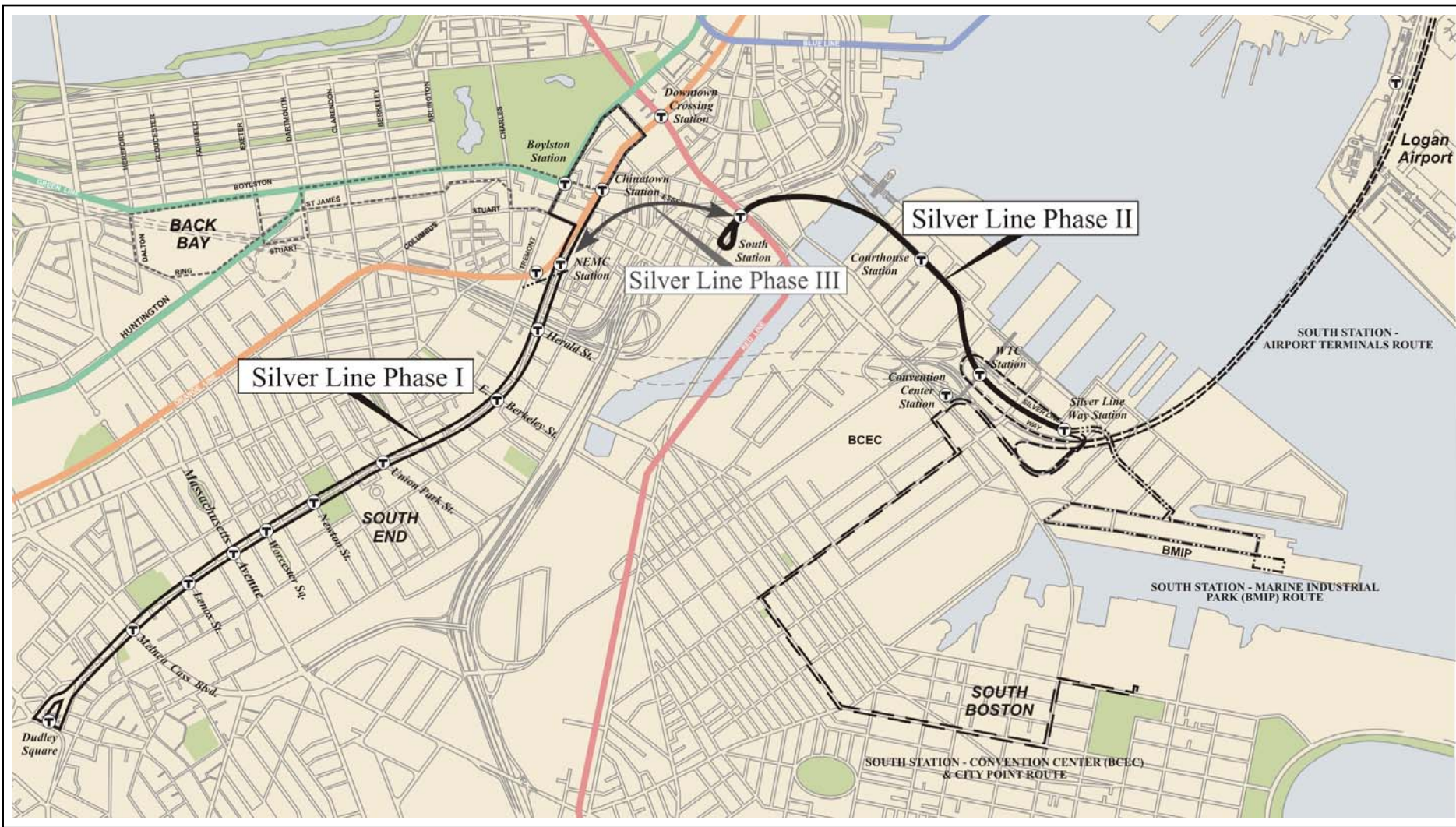
Bus Service: Revitalization



- 343 new buses running on environmentally-friendly Compressed Natural Gas
- 260 new emission-control diesel buses
- 28 new Trackless Trolleys
- Overhaul of existing buses, and new maintenance facilities at Arborway and Southampton St.



Silver Line Overview





Silver Line Phase I: July 2002

Washington Street: Stations and Route

- Complete street reconstruction
- Reserved BRT lane
- New lighting, landscaping, street furniture
- Future conversion to Light Rail Transit (LRT) possible





Phase II : Silver Line

First New Line since 1918

1-mile tunnel from South Station to South Boston Waterfront

3 new stations:

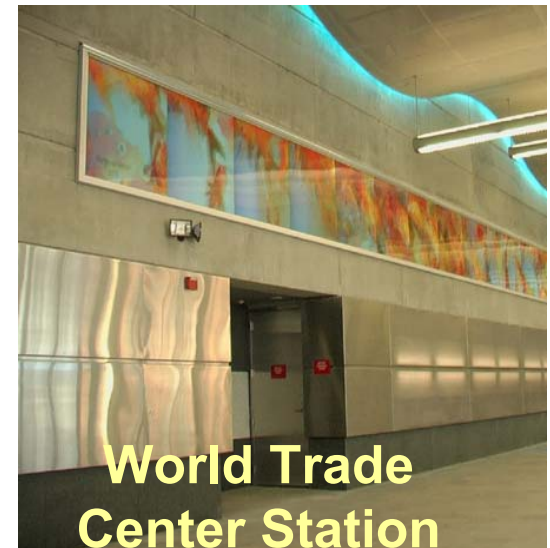
- South Station
- Courthouse Station
- World Trade Center Station



South Station



Courthouse Station



World Trade Center Station

The Silver Line: New Stations Open



- Phase II, the tunnel from South Station to South Boston opened December 17, 2004





The Silver Line: Expansion



- 60-foot buses on Phase I
- Phase II, the tunnel from South Station to South Boston opened December 17, 2004
- 32 new vehicles for phase II
- Phase III preliminary design is underway, received FTA Recommended Rating



The Silver Line: Phase III Stations



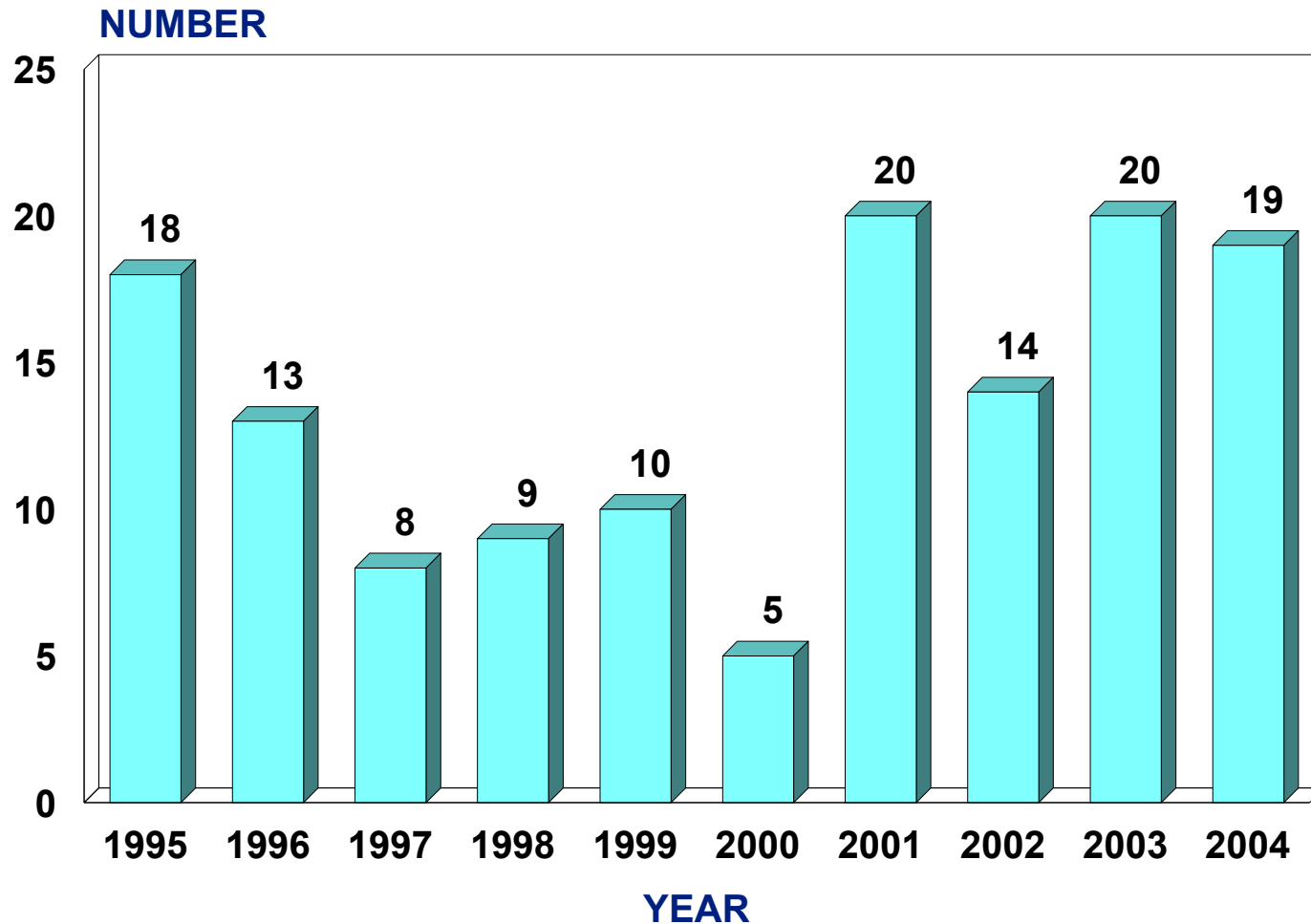
- Phase III, the connection from Boylston station to South station
- Two new stations to be designed: Chinatown and Boylston





PROFESSIONAL SERVICES CONTRACTS

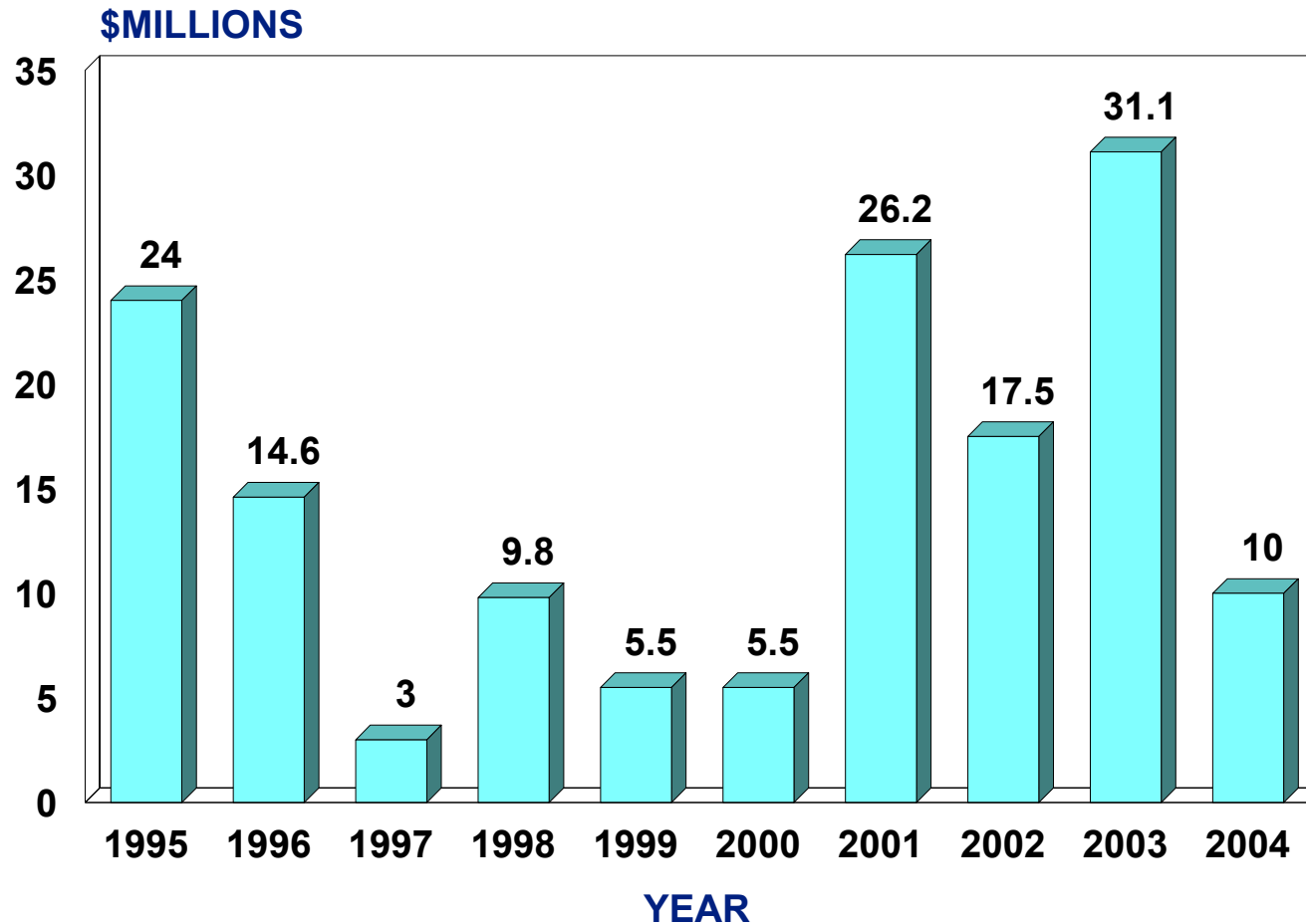
NUMBER OF CONTRACTS AWARDED





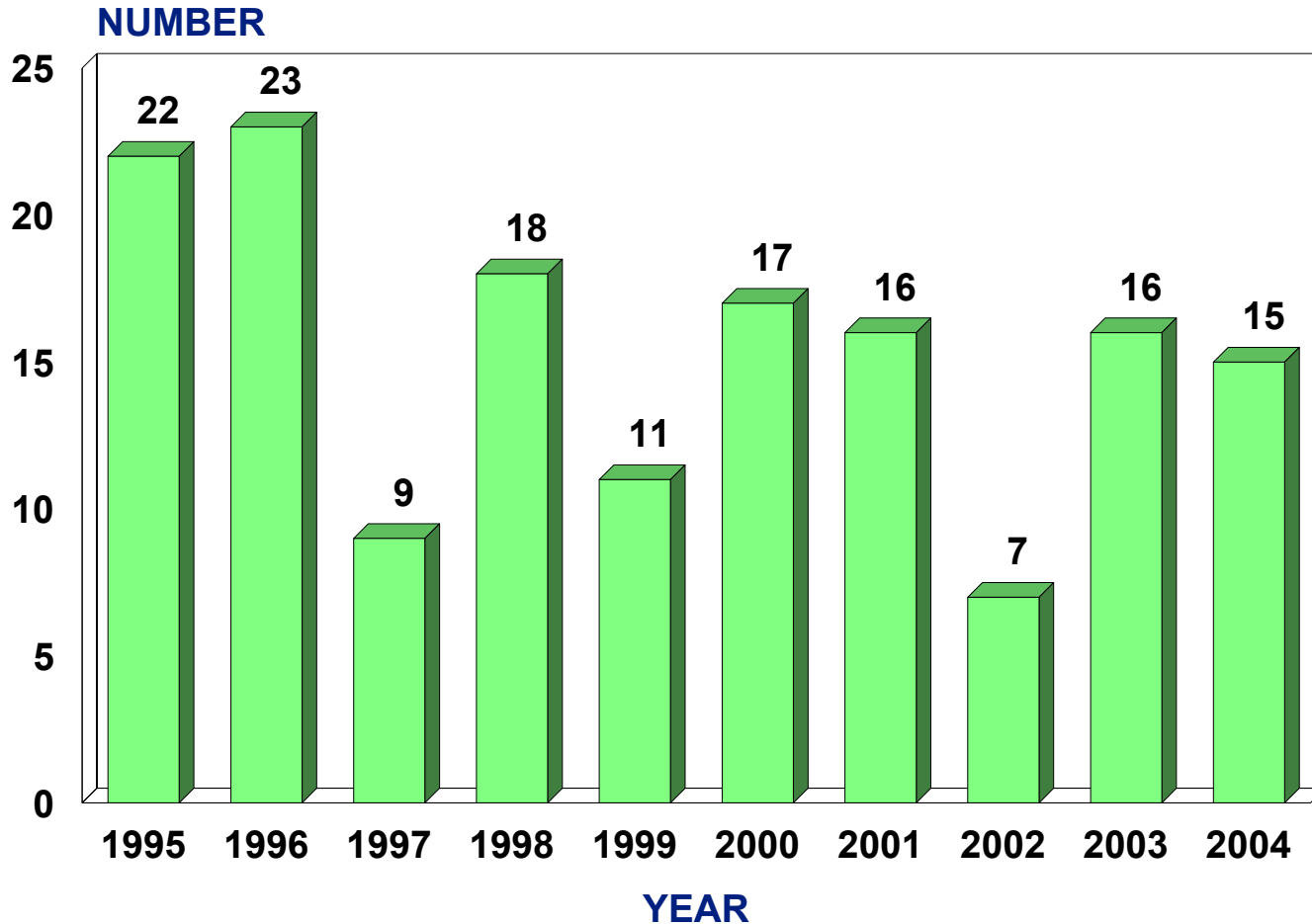
PROFESSIONAL SERVICES CONTRACTS

\$ VALUE OF CONTRACT AWARDS





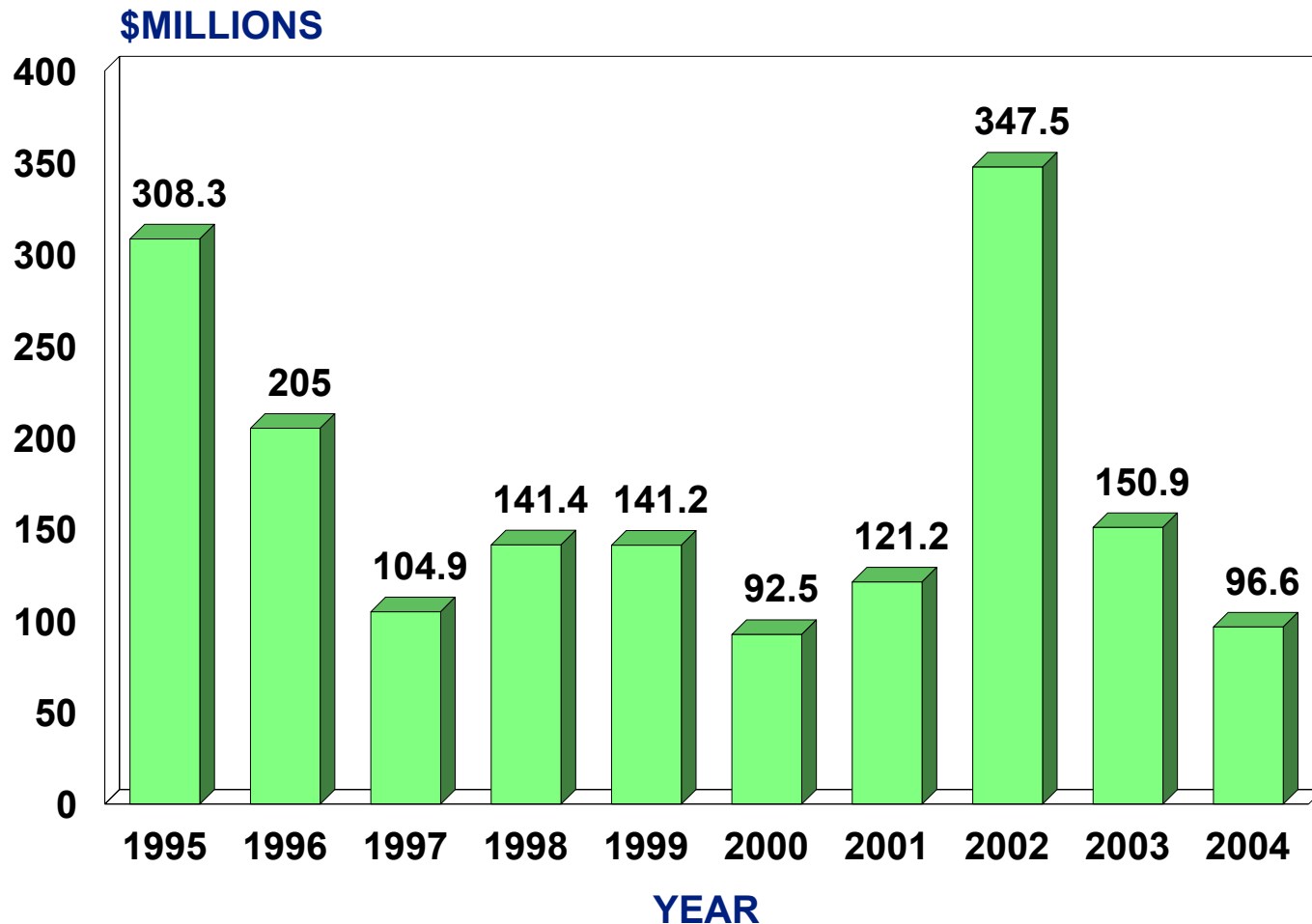
CONSTRUCTION CONTRACTS NUMBER OF CONTRACTS AWARDED





CONSTRUCTION CONTRACTS

\$ VALUE OF CONTRACT AWARDS



Red Line: Reinvestment



- Reconstruct five Dorchester branch stations: Ashmont, Savin Hill, Fields Corner, Shawmut, and Mattapan
- Rebuild Charles/MGH for complete accessibility
- Behind-the-scenes: power, vents, bridges, etc.





Green Line: Accessibility



- New low-floor cars for easy boarding
- Renovation of four stations: Kenmore, Copley, Arlington, Government Center
- Track improvements



Blue Line: Capacity and Modernization



- 94 new cars for six-car trains
- Reconstruct six stations: Orient Heights, Maverick, State Street, Government Center, Airport, Aquarium
- Expanded and rehabilitated carhouse at Orient Heights
- Track and power improvements

Orange Line: Reinvestment



- New signal system
- North Station Transportation Center
- Continued reinvestment in the vehicle fleet

Commuter Rail: Reinvestment + Capacity



- New service on Greenbush Line to Braintree, Weymouth, Hingham, Cohasset, and Scituate
- Fairmount Corridor project will revitalize line through Dorchester and Mattapan
- Overhauls of coaches and locomotives
- Track replacement



“Behind-the-Scenes” Investments



- Station mid-life overhauls will continue
- Systemwide Radio Project
- Multiple bridges will be rebuilt
- Environmental cleanup projects
- Track and signal investments
- Power equipment upgrades

Station Management Project



- Revolutionize the way the MBTA does business
- Replace tokens with CharlieCards and CharlieTickets
- Replace turnstiles with automatic gates and ticket machines
- Token collectors become customer service agents
- Friendlier, safer, more efficient MBTA





1. REDEVELOP FIRST. Support the revitalization of community centers and neighborhoods. Encourage reuse and rehabilitation of existing infrastructure rather than the construction of new infrastructure in undeveloped areas. Give preference to redevelopment of brownfields, preservation and reuse of historic structures and rehabilitation of existing housing and schools.



2. CONCENTRATE DEVELOPMENT. Support development that is compact, conserves land, integrates uses, and fosters a sense of place. Create walkable districts mixing commercial, civic, cultural, educational and recreational activities with open space and housing for diverse communities.



3. BE FAIR. Promote equitable sharing of the benefits and burdens of development. Provide technical and strategic support for inclusive community planning to ensure social, economic, and environmental justice. Make regulatory and permitting processes for development clear, transparent, cost-effective, and oriented to encourage smart growth and regional equity.



4. RESTORE AND ENHANCE THE ENVIRONMENT. Expand land and water conservation. Protect and restore environmentally sensitive lands, natural resources, wildlife habitats, and cultural and historic landscapes. Increase the quantity, quality and accessibility of open space. Preserve critical habitat and biodiversity. Promote developments that respect and enhance the state's natural resources.



5. CONSERVE NATURAL RESOURCES. Increase our supply of renewable energy and reduce waste of water, energy and materials. Lead by example and support conservation strategies, clean power and innovative industries. Construct and promote buildings and infrastructure that use land, energy, water and materials efficiently.



6. EXPAND HOUSING OPPORTUNITIES. Support the construction and rehabilitation of housing to meet the needs of people of all abilities, income levels and household types. Coordinate the provision of housing with the location of jobs, transit and services. Foster the development of housing, particularly multifamily, that is compatible with a community's character and vision.



7. PROVIDE TRANSPORTATION CHOICE. Increase access to transportation options, in all communities, including land- and water-based public transit, bicycling, and walking. Invest strategically in transportation infrastructure to encourage smart growth. Locate new development where a variety of transportation modes can be made available.



8. INCREASE JOB OPPORTUNITIES. Attract businesses with good jobs to locations near housing, infrastructure, water, and transportation options. Expand access to educational and entrepreneurial opportunities. Support the growth of new and existing local businesses.



9. FOSTER SUSTAINABLE BUSINESSES. Strengthen sustainable natural resource-based businesses, including agriculture, forestry and fisheries. Strengthen sustainable businesses. Support economic development in industry clusters consistent with regional and local character. Maintain reliable and affordable energy sources and reduce dependence on imported fossil fuels.



10. PLAN REGIONALLY. Support the development and implementation of local and regional plans that have broad public support and are consistent with these principles. Foster development projects, land and water conservation, transportation and housing that have a regional or multi-community benefit. Consider the long-term costs and benefits to the larger Commonwealth.

For additional information, contact the Massachusetts Office for Commonwealth Development at (617) 573-1380.

<http://www.mass.gov/ocd/>



Sustainable Design Guidelines & Projects



- **Dorchester Red Line Stations:**
Ashmont, Fields Corner, Savin Hill
and Shawmut
- **Maintenance Facilities:** Arborway
Bus , and Wellington Bus facility
- **Expanded and rehabilitated
carhouse at Orient Heights**
- **New Silver Line Stations**
- **Fairmount Corridor : Four new
Stations**



Design Guidelines



Implement set of Sustainable design Guidelines

Integrate the “greening” of the building into design from the start

Water reclamation

Lighting

Building Materials

Drainage

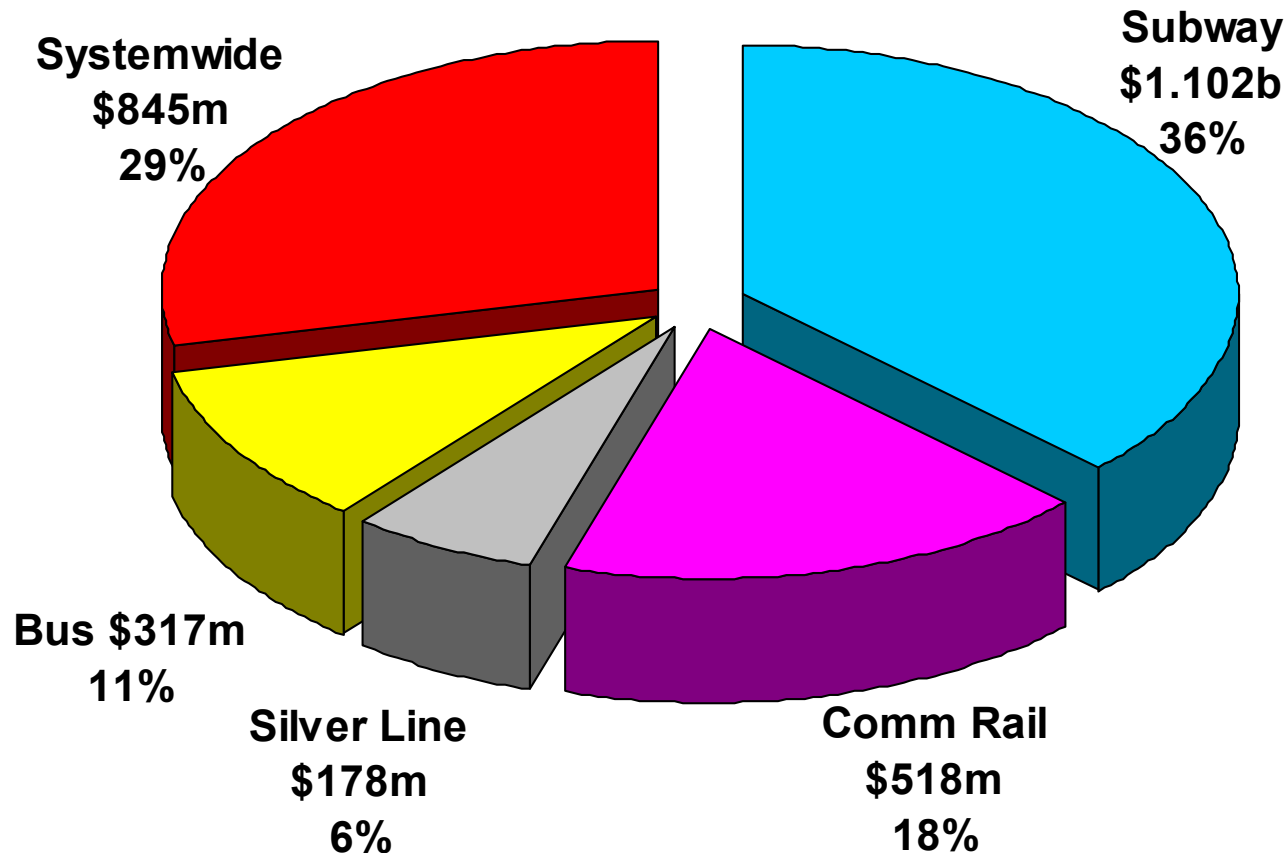
Waste material removal





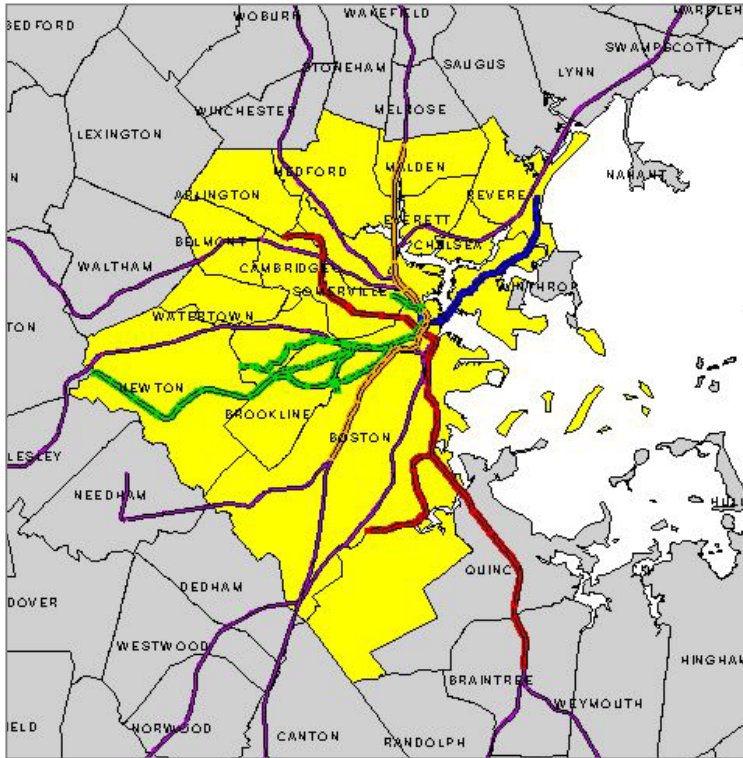
The CIP Invests in All Modes

**Total Draft CIP:
\$2.96 billion**

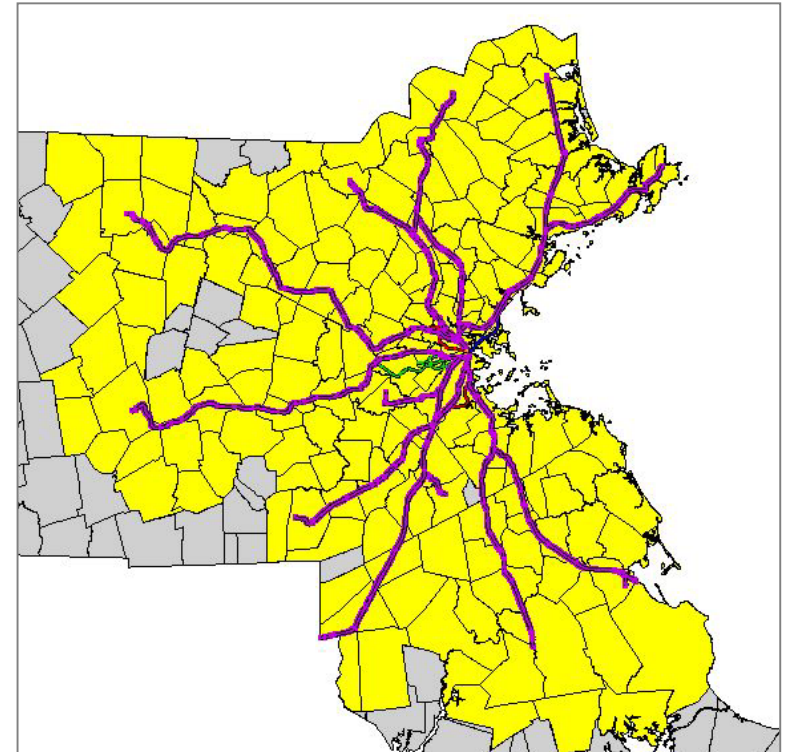




Where Does the CIP Invest Funds?



Core Service Areas:
Bus, Subway, Silver Line
\$2.233b
75%



Suburban Service Areas:
Commuter Rail, some Bus
\$725m
25%



Where Does the CIP Invest Funds?

Fairmount Corridor Improvement Program

- Bridges
- New stations :
- Four Corners, Newmarket, Talbot Avenue,
Blue Hill Avenue

CNG Bus Facility : Wellington , Medford

Core Service Areas:
Bus, Subway, Silver Line
\$2.233b
75%

Suburban Service Areas:
Commuter Rail, some Bus
\$725m
25%

MBTA Website: Doing Business with the T

The screenshot shows a Microsoft Internet Explorer browser window displaying the MBTA website. The address bar shows http://www.mbta.com/business_t/professional.asp. The page features the MBTA logo and navigation links such as 'Inside the T', 'Traveling on the T', 'T Projects', 'Doing Business with the T', 'Contact Us', and 'Home'. A sidebar on the left lists various services under 'Doing Business with the T', including Contract Administration, Bidding & Solicitations, and more. The main content area is titled 'Professional Services Solicitations' and includes a 'Solicitation for ENGINEERING Services' section. It provides contact information for the Transportation Building at 10 Park Plaza, Boston, and details the scope of work for engineering services related to the Wellington Bus Maintenance Facility and Parking Garage.

MBTA - Massachusetts Bay Transportation Authority:Doing Business with the T - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Mail Print W Links

Address http://www.mbta.com/business_t/professional.asp Go

T Massachusetts Bay Transportation Authority
America's First Subway

Inside the T Traveling on the T T Projects Doing Business with the T Contact Us Home

TEXT ONLY

Site Map | Search | FAQs | Transit Links | Visiting Boston

Doing Business with the T

- Contract Administration
- Bidding & Solicitations
- Contractor's Business Forum
- Advertising
- Filming
- Real Estate
- Diversity at Work
- Subway Performers Program
- MBTA ePs System
- Company Registration

Transit Updates

Schedules, Maps & Station Info

Passes, Programs & Fares

Quick Links:

- Subway Map
- Bus / System Map
- Commuter Rail Map

[Doing Business with the T](#) > [Bidding & Solicitations](#) > Professional Services Solicitations

Professional Services Solicitations

•[Solicitation for ENGINEERING Services](#)

•View [Construction Contract Bid Solicitations](#)

PUBLIC ANNOUNCEMENT
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
TRANSPORTATION BUILDING
10 PARK PLAZA
BOSTON, MASSACHUSETTS 02116-3975

SOLICITATION FOR ENGINEERING SERVICES

Scope of Work:
The Massachusetts Bay Transportation Authority is soliciting Professional Engineering Services for the Wellington Bus Maintenance Facility and Parking Garage.

The selected consultant will exhibit a depth of experience in the design and construction of intermodal facilities, including transit stations, enclosed bus maintenance facilities, new vehicle technologies, and parking structures. Services will include Preliminary Design, Final Design and Construction Phase Services. The primary disciplines involved in this project include, but are not limited to, environmental planning, permitting, and remediation: urban and

<http://www.mbta.com/index.asp> Internet